
First Record of the Genus *Oryctina* (Loranthaceae) in Mesoamerica: *O. costaricensis*, a New Species from Costa Rica

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ABSTRACT. *Oryctina costaricensis* Kuijt (Loranthaceae), from the Osa Peninsula of Costa Rica, is described and illustrated. It represents the first record of the genus in Mesoamerica, the remainder of the genus being South American.

Key words: Costa Rica, Loranthaceae, Mesoamerica, *Oryctina*.

Among the several Neotropical small-flowered genera of Loranthaceae, the genus *Oryctina* Tieghem may well possess the smallest flowers. It is characterized by indeterminate inflorescences bearing pairs of bracteolate, sessile flowers, each solitary in the axil of a scale leaf. Two recently collected fruiting specimens from the Osa Peninsula, Costa Rica, have turned out to be a new species of the genus which is here registered.

***Oryctina costaricensis* Kuijt, sp. nov.** TYPE: Costa Rica. Puntarenas: Cantón de Osa, Peninsula de Osa, R.F. Golfo Dulce, Rancho Quemado, Sector Sureste, 8°40'50"N, 83°33'00"W, 250 m, 16 Sep. 1992, *J. Marin & D. Marin 521* (holotype, LEA; isotypes, CR not seen, MO not seen, INB not seen). Figures 1, 2.

Planta foliosa, glabra; rami juniores leviter angulati, vetustiores teretes. Folia opposita plus minusve obovata, usque ad 7.5 × 3.5 cm, in apice obtusa. Inflorescentia spicata, indeterminata, terminalis et ad axillas foliorum interposita. Flores bisexuales bracteolatae.

Plants to ca. 25 cm high, with epicortical roots only at the base, glabrous except for 2 conspicuous furfuraceous lines on the 2 keels of the young, carinate internodes; older stems ± terete except for the 2 persisting, now essentially smooth ridges but bearing numerous small, pustular, cinnamon-brown lenticels; basal epicortical roots present. Leaves to 7.5 × 3.5 cm, lanceolate to nearly elliptical, thin, apex mostly rounded, base obtuse; petiole ca. 5 mm, distinct; venation pinnate, rather obscure. Inflorescence to 5 cm, slender, both terminal and axillary, keeled with narrow furfuraceous ridge-lines, consisting of up to 10 internodes, some axillary inflorescences with 1 or 2 pairs of sterile scale leaves below; each inflorescence a spike of paired, sessile, bisexual

flowers. Mature bud ca. 3.5–4 mm, 1 mm of which is the ovary with smooth calyculus, apex nearly acute; petals 6, dimorphic; flower subtended by 1 mm triangular to acute bract and 2 exposed triangular bracteoles ca. 0.5 mm; stamens dimorphic, the 2 anther series not overlapping; filaments ca. 0.5 mm, stout, terete, extending downward into thickened petal portion; pollen sacs 4, ca. 0.5 mm, the anther surmounted in a fleshy connectival horn that on lower anthers is as long as the anthers and acute, on higher anthers 1/2 as long and nearly blunt-tipped; style terete, somewhat indented by the anthers, stigma indistinct, finely papillate. Fruit ca. 9 × 4 mm, narrowly obovoid, with nearly invisible calyculus.

Oryctina costaricensis is a morphologically distinctive but apparently inconspicuous species, the only known member of its genus in Mesoamerica. The solitary, sessile flowers, flanked by triangular bracteoles and arranged on an indeterminate spike, firmly place the species in *Oryctina*. The related South American genus *Cladocolea* Tieghem generally has tetramerous flowers and lacks floral bracteoles, the inflorescence being mostly determinate. Within the present genus, *O. costaricensis* shows clear affinities with *O. pedunculata* (Kuijt) Kuijt and *O. badilloi* (Ferrari) Kuijt. It differs from those species in its very different leaf shape, the presence of terminal inflorescences, inflorescences with 10 or more flower pairs, strongly dimorphic connectival horns, and a much less distinct stigma. *Oryctina pedunculata* and *O. badilloi* are presently known only from Venezuela, more than 1000 km to the east. If, as recently has been intimated (Kuijt, 2000), the genus *Maracanthus* Kuijt needs to be revived, a transfer to that genus will be necessary. (*Oryctina pedunculata* is stated to be dioecious, but I do not consider that securely established.)

It seems appropriate to draw attention to the Osa Peninsula as having an unusual assemblage of Loranthaceae with strong South American affinities. Recent collections have documented the existence there of *Psittacanthus acinarius* (Martius) Martius and *P. cucullaris* (Lamarek) G. Don, both of which are otherwise strictly South American, unknown even from intervening Panama. *Psittacanthus costaricensis*

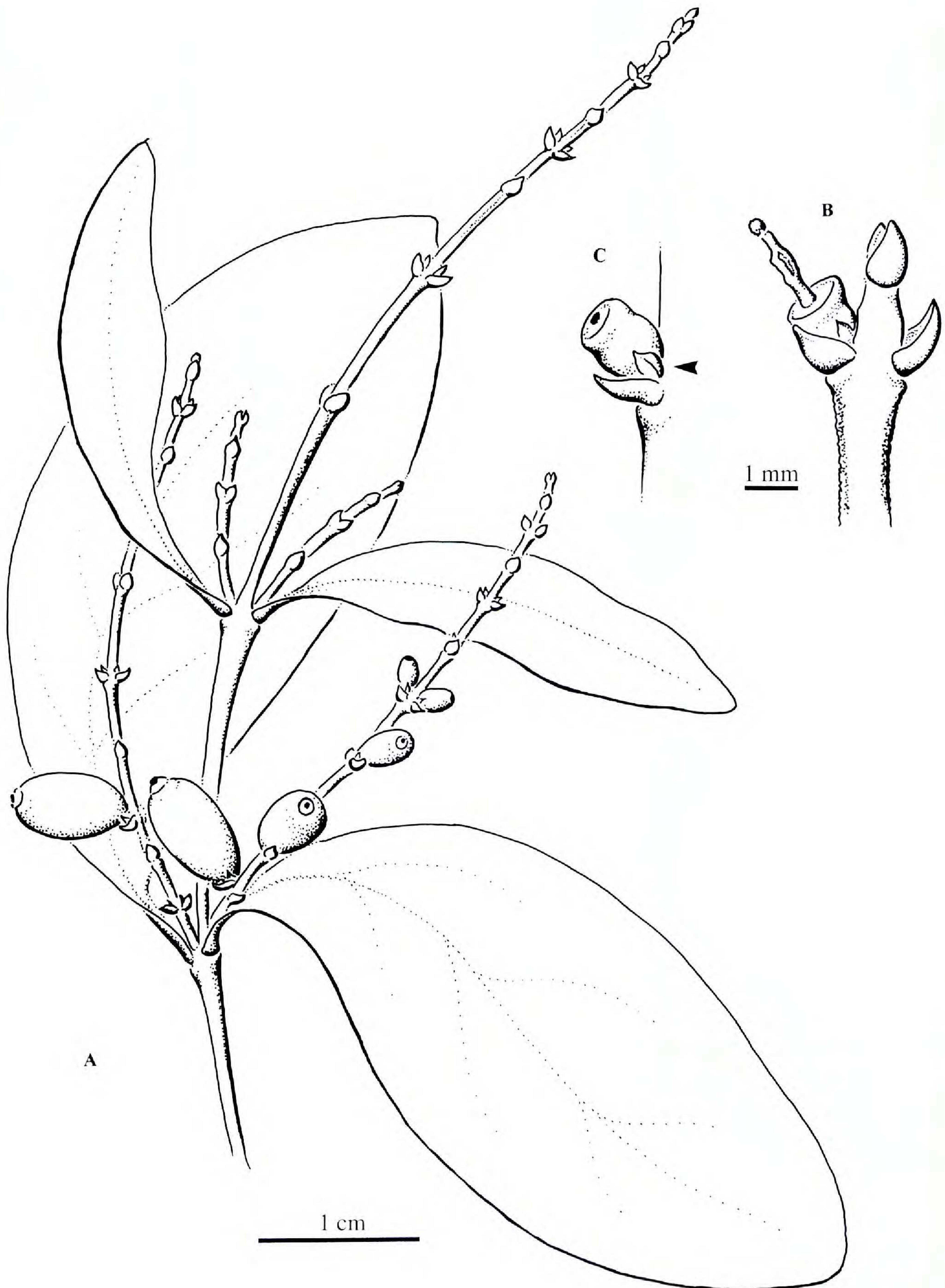


Figure 1. *Oryctina costaricensis* Kuijt. —A. Habit, partly reconstructed. —B. Inflorescence tip with remnant of flower. —C. Young fruit (arrow indicates bracteole). Drawn from the holotype, *Marin & Marin 521* (LEA).

Kuijt, also known from the same area and related to South American species, provides a third example of this distributional pattern. Finally, an undescribed species of *Psittacanthus* with clear South American

affinities, also from the Osa Peninsula, will be described in my forthcoming monograph of that genus (Kuijt, in prep.). I have no explanation for this unusual concentration of South American elements on the

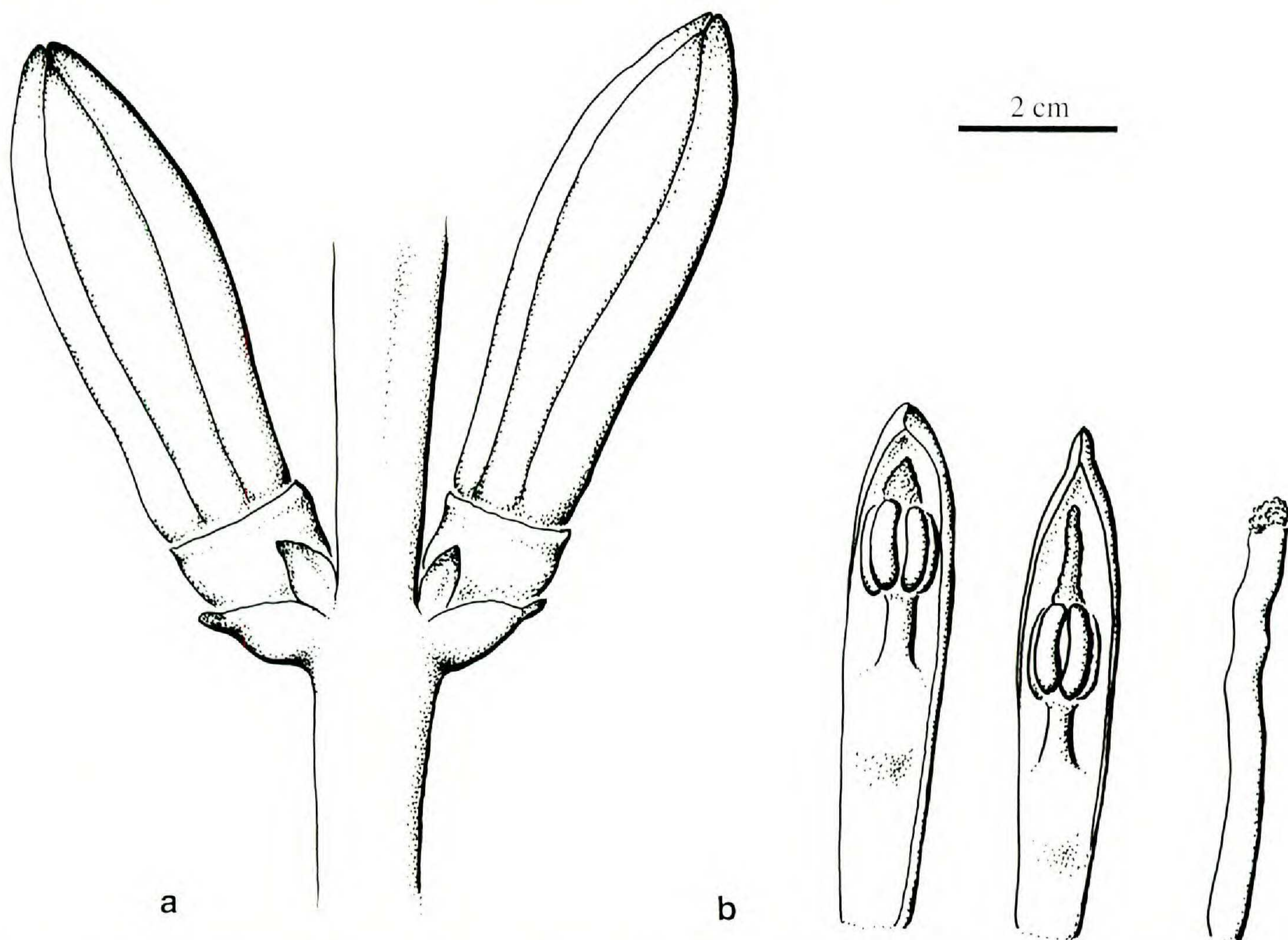


Figure 2. *Oryctina costaricensis* Kuijt. —a. Mature buds. —b. Floral dissection showing petal and stamen dimorphism and style. Drawn from the paratype, *Aguilar 573* (INB).

Peninsula, but a connection to avian flyways may be suspected. The geographic position of *Oryctina costaricensis* lies at least 800 km from its nearest congener, *O. chlamydata* (Rizzini) Kuijt (Kuijt, 1976). It is true that mistletoe seeds pass through the avian digestive tract rapidly, thus limiting dispersal (Kuijt, 1969; Barlow & Schodde, 1993). However, authentic instances of long-distance dispersal do exist, as in *Phoradendron berterioanum* (DC.) Grisebach on the Galápagos Islands (Kuijt, 2003). The possibility of seeds adhering to feathers and thus being carried over long distances also exists (Kuijt, 1969). Most species of *Oryctina* are highly limited in their geographic distribution, and *O. costaricensis* fits that pattern.

Paratype. COSTA RICA. **Puntarenas:** Osa, Reserva Forestal, Golfo Dulce, Rancho Quemado, 400–500 m, *R. Aguilar 573* (INB).

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